

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks.

Claims 1-8 and 10-40 are pending in the application, with Claims 1, 17, 22, 31, 35, and 39 being independent. Claim 9 was previously canceled. Claim 19 is hereby canceled. Claims 1, 14-15, 17, 22, 29-32, 35, and 39 are amended herein. Support for the claim amendments and additions can be found in the original disclosure. No new matter has been added.

§ 103 REJECTIONS

Claims 1-8 and 10-40 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. 7,231,516 to Sparrell et al. (hereinafter "Sparrell") in view of U.S. 7,124,303 to Candelore (hereinafter "Candelore").

Independent Claim 1, as currently presented, recites:

1. A method, comprising:
analyzing a transport stream that includes one or more header portions and one or more corresponding payload portions, each of the header portions a packetized elementary stream (PES) header and a frame header, wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header; and
preparing the transport stream for a data extraction by encrypting at least some of the payload portions, while leaving the one or more corresponding header portions unencrypted at all times, and

generating a multiplex-compliant encryption method packet for each PES header, each multiplex-compliant encryption method packet at least identifies encrypted portions of the transport stream and includes a decryption key for decrypting the encrypted portions.

Applicant respectfully traverses the rejection. First, Sparrell does not recite, “generating *a multiplex-compliant encryption method packet* for each PES header, each multiplex-compliant encryption method packet *at least identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions,*” as recited in Claim 1. (Emphasis added).

Instead, Sparrell is silent with respect to this element of Claim 1. This is supported by the fact that the Office Action cites Candelore in rejecting “generating *a multiplex-compliant encryption method packet* for each PES header, each multiplex-compliant encryption method packet *at least identifies encrypted portions of the transport stream,*” as recited in Claim 1. (Office Action, Page 2, Lines 12-16; Page 4, Lines 8-11). (Candelore, Column 11, Line 60 -Column 12, Line 31).

Second, the deficiencies of Sparrell with respect to this element are not remedied by the disclosure of Candelore. Even assuming, *in arguendo*, that the program specific information (PSI) disclosed by Candelore is equivalent to the “multiplex-compliant encryption method packet” recited in Claim 1, Candelore nevertheless does not disclose that its PSI “*includes a decryption key for decrypting the encrypted portions,*” as recited in Claim 1.

Instead, in instances where Candelore discloses “decryption keys”, the “decryption keys” are apparently disclosed in the context of “packets” that are not part of

the program specific information (PSI). For example, the following paragraphs of Candelore states:

A conventional cable system arrangement is depicted in FIG. 1. In such a system, the cable operator processes audio/video (A/V) content 14 with CA technology from manufacturer A (system A) using CA encryption equipment 18 compliant with system A at the cable system-headend 22. The encrypted A/V content along with system information (SI) 26 *and program specific information (PSI) 27* is multiplexed together and transmitted over the cable system 32 to a user's STB 36. STB 36 incorporates decrypting CA equipment from system A (manufacturer A) 40 that decrypts the A/V content. The decrypted A/V content can then be supplied to a television set 44 for viewing by the user.

In a cable system such as that of FIG. 1, digital program streams are broken into packets for transmission. Packets for each component of a program (video, audio, auxiliary data, etc.) are tagged with a packet identifier or PID. These packet streams for each component of all programs carried within a channel are aggregated into one composite stream. *Additional packets are also included to provide decryption keys and other overhead information.* Otherwise unused bandwidth is filled with null packets. Bandwidth budgets are usually adjusted to utilize about 95% of the available channel bandwidth.

(Candelore, Column 2, Lines 56-67; Column 3, Lines 1-11, emphasis added). Thus, Candelore discloses the “encryption keys” are included in “additional packets”, not in program specific information (PSI).

Third, Candelore also does not disclose, “generating a multiplex-compliant encryption method packet for *each* PES header,” as recited in Claim 1. (Emphasis added). In other words, while Candelore following discloses that PSI data are sent to both legacy and non-legacy set-top boxes in MPEG data structure format, as well as data streams that include PES headers, Candelore does not disclose that its PSI data is generated for *each* PES header. (Candelore, Column 7, Lines 65-67; Column 18, Lines 60-64.)

Fourth, additional disclosures of Sparrell cannot be combined with Candelore to disclose, teach, or fairly suggest the above recited element of Claim 1. In another section

of the Office Action, the Office Action states that “Sparrell discloses that PSI information include the keys used to decrypt the stream (Col. 8, lines 38-67), which meets the limitation of receiving the multiplex-compliant encryption method packet corresponding to the transport stream...the decryption is included in the encryption method packet.” (Office Action, Page 7, Lines 16-20). However, Sparrell does not disclose PSI information, as “PSI information” is only disclosed in Candelore. Thus, while Sparrell discloses that television content may be encrypted with encryption keys in Column 8, Lines 38-37, Sparrell does not disclose “PSI information” which includes the keys used to decrypt the stream.

Moreover, the disclosure of Sparrell with regards to encryption keys in Column 8, Lines 38-37 cannot be combined with the disclosure of Candelore with respect to program specific information (PSI) to teach a “multiplex-compliant encryption method packet...includes a decryption key for decrypting the encrypted portions,” as recited in Claim 1. As noted above, Candelore specifically discloses the “encryption keys” are included in “additional packets”, not in program specific information (PSI). (Candelore, Column 2, Lines 56-67; Column 3, Lines 1-11).

Likewise, in an additional section of the Office Action, the Office Action states that “Sparrell discloses that the encrypted transport stream includes index information, and cryptographic key information (Col. 9, lines 1-7 and 60-63), which meets the limitation of the encryption method packet further identifies an encryption algorithm...provide at least a basis for key to decrypt the encrypted portions of the transport stream.” (Office Action, Page 6, Lines 3-7). However, similar to stated above, while Sparrell discloses the use of various encryption keys to decrypt data file in Column 9, Lines 1-7 and 60-63, Sparrell does not disclose that its encryption keys are included in “PSI information”.

Further, the disclosure of Sparrell with regards to encryption keys in Column 9, Lines 1-7 and 60-73 cannot be combined with the disclosure of Candelore with respect to program specific information (PSI) to teach a “multiplex-compliant encryption method packet...includes a decryption key for decrypting the encrypted portions,” as recited in Claim 1. As noted above, Candelore specifically discloses the “encryption keys” are included in “additional packets”, not in program specific information (PSI). (Candelore, Column 2, Lines 56-67; Column 3, Lines 1-11).

Thus, for at least the foregoing reasons, the cited references to Sparrell and Candelore, whether individually or in combination, do not teach, disclose, or fairly suggest every aspect of Claim 1. Accordingly, Claim 1 is believed to be allowable over the cited references.

Due to the Applicant’s earnest belief that the Claim 1, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 1 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references. Thus, for at least the foregoing reasons, Claim 1 is believed to be allowable.

Dependent Claims 2-8 and 10-16 depend from independent Claim 1 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent Claim 17, as currently presented, recites:

17. A method, comprising:

receiving a partially encrypted transport stream that includes one or more header portions, each of the one or more header portions being unencrypted at all times and including at least one of a packetized elementary stream (PES) header and a frame header, and one or more encrypted payload portions, wherein each of the unencrypted header portions enables the processing of the one or more corresponding encrypted payload portions based on at least one of the PES header and the frame header;

generating a multiplex-compliant encryption method packet that corresponds to the transport stream, the *multiplex-compliant encryption method packet identifies encrypted portions of the transport stream* and includes *a decryption key for decrypting the encrypted portions*; and

extracting data from the transport stream in a manner that bypasses the one or more encrypted payload portions of the transport stream. (Emphasis added).

Applicant respectfully traverses the rejection. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 17 recite the same features. Accordingly, Applicant respectfully submits that that the cited references to Sparrell and Candelore, whether individually or in combination, do not teach, disclose, or fairly suggest, “the *multiplex-compliant encryption method packet identifies encrypted portions of the transport stream* and includes *a decryption key for decrypting the encrypted portions*,” as recited in Claim 17. (Emphasis added).

Due to the Applicant’s earnest belief that the Claim 17, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 17 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references. Thus, for at least the foregoing reasons, Claim 17 is believed to be allowable.

Dependent Claims 18-21 depend from independent Claim 17 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent Claim 22, as currently presented, recites:

22. A computer-readable storage medium having one or more instructions that are executable by one or more processors, the one or more instructions causing the one or more processors to:

- analyze a transport stream that includes one or more header portions, each of the one or more header portions being unencrypted at all times and including at least one of a packetized elementary stream (PES) header and a frame header, and one or more payload portions, wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header; and
- prepare the transport stream for a data extraction by encrypting at least some of the payload portions while leaving the one or more corresponding header portions unencrypted; and
- generate a *multiplex-compliant* encryption method packet that at least *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*. (Emphasis added).

Applicant respectfully traverses the rejection. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 22 recite the same features. Accordingly, Applicant respectfully submits that that the cited references to Sparrell and Candelore, whether individually or in combination, do not teach, disclose, or fairly suggest, “generate a *multiplex-compliant* encryption method packet that at least *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*,” as recited in Claim 22. (Emphasis added).

Due to the Applicant's earnest belief that the Claim 22, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 22 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references. Thus, for at least the foregoing reasons, Claim 22 is believed to be allowable.

Dependent Claims 23-30 depend from independent Claim 22 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent Claim 31, as currently presented, recites:

31. computer-readable storage medium having one or more instructions that are executable by one or more processors, the one or more instructions causing the one or more processors to:
 - receive a partially encrypted transport stream that includes one or more unencrypted header portions, each of the one or more header portions being unencrypted at all times and including at least one of a packetized elementary stream (PES) header and a frame header, and one or more payload portions, and one or more encrypted payload portions, wherein each of the unencrypted header portions enables the processing of the one or more corresponding encrypted payload portions based on at least one of the PES header and the frame header;
 - generate a multiplex-compliant encryption method packet that corresponds to the transport stream, the *multiplex-compliant encryption method packet identifies encrypted portions of the transport stream and includes a decryption key for decrypting the encrypted portions*; and
 - extract data from the transport stream based on the one or more unencrypted header portions of the transport stream.(Emphasis added).

Applicant respectfully traverses the rejection. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 31 recite the same features. Accordingly, Applicant respectfully submits that the cited references to Sparrell and Candelore, whether individually or in combination, do not teach, disclose, or fairly suggest, “the *multiplex-compliant* encryption method packet *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*,” as recited in Claim 31. (Emphasis added).

Due to the Applicant’s earnest belief that the Claim 31, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 31 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references. Thus, for at least the foregoing reasons, Claim 31 is believed to be allowable.

Dependent Claims 32-34 depend from independent Claim 31 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent Claim 35, as currently presented, recites:

35. An apparatus, comprising:
an analyzer to determine which portions of a transport stream are to pass unencrypted, wherein the analyzer identifies one or more header portions, each of the one or more header portions being unencrypted at all times and including at least one of a packetized elementary stream (PES) header and a frame header, and one or more payload portions in the transport stream, wherein each of the

- header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header;
- a scrambler to encrypt at least some of the payload portions while leaving the one or more corresponding header portions unencrypted based on the determination; and
- a generator to generate a *multiplex-compliant* encryption method packet that *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*. (Emphasis added).

Applicant respectfully traverses the rejection. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 35 recite the same features. Accordingly, Applicant respectfully submits that that the cited references to Sparrell and Candelore, whether individually or in combination, do not teach, disclose, or fairly suggest, “a generator to generate a *multiplex-compliant* encryption method packet that *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*,” as recited in Claim 35. (Emphasis added).

Due to the Applicant’s earnest belief that the Claim 35, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 35 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references. Thus, for at least the foregoing reasons, Claim 35 is believed to be allowable.

Dependent Claims 36-39 depend from independent Claim 35 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent Claim 39, as currently presented, recites:

39. An apparatus, comprising:
- means for determining which portions of a transport stream are to pass unencrypted, wherein the analyzer identifies one or more header portions, each of the one or more header portions being unencrypted at all times and including at least one of a packetized elementary stream (PES) header and a frame header, and one or more payload portions in the transport stream, wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header;
 - means for encrypting at least some of the payload portions while leaving the one or more corresponding header portions unencrypted in accordance with the determination; and
 - means for generating a *multiplex-compliant* encryption method packet that *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*. (Emphasis added).

Applicant respectfully traverses the rejection. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 39 recite the same features. Accordingly, Applicant respectfully submits that the cited references to Sparrell and Candelore, whether individually or in combination, do not teach, disclose, or fairly suggest, “means for generating a *multiplex-compliant* encryption method packet that *identifies encrypted portions of the transport stream* and *includes a decryption key for decrypting the encrypted portions*,” as recited in Claim 39. (Emphasis added).

Due to the Applicant’s earnest belief that the Claim 39, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 39 during this response. However, Applicant hereby reserves the right to further challenge

motivation to combine the cited references. Thus, for at least the foregoing reasons, Claim 39 is believed to be allowable.

Dependent Claim 40 depends from independent Claim 39 and is allowable by virtue of this dependency, as well as for additional features that it recites.

In closing, Applicant's decision not to discuss the differences between the cited art and each dependent claim should not be considered as an admission that Applicant concurs with the conclusions set forth in the Office Action that these dependent claims are not patentable over the disclosure in the cited references. Similarly, Applicant's decision not to discuss differences between the prior art and every claim element, or every comment set forth in the Office Action, should not be considered as an admission that Applicant concurs with the interpretation and assertions presented in the Office Action regarding those claims. Indeed, Applicant believes that all of the dependent claims patentably distinguish over the references cited. Moreover, a specific traverse of the rejection of each dependent claim is not required, since dependent claims are patentable for at least the same reasons as the independent claims from which the dependent claims ultimately depend.

CONCLUSION

For at least the foregoing reasons, Claims 1-8, 10-18, and 20-40 are in condition for allowance. Applicant respectfully requests reconsideration and withdrawal of the rejections and an early notice of allowance.

If any issue remains unresolved that would prevent allowance of this case, Applicant requests that the Examiner contact the undersigned attorney to resolve the issue.

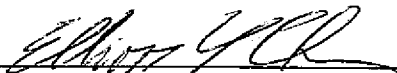
Respectfully Submitted,

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